

REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars.

1. Interview of February 2, 2010

The applicants are appreciative of the opportunity to discuss the pending application with the examiner during the interview of February 2, 2010.

During the interview, proposed amendments to the claims to overcome the formal objections and rejections of the claims were discussed, as well as U.S. patent nos. 4,013,490 (*Ryan et al.*) and 6,380,547 (*Gonzalez et al.*), and a definition of the phrase “mixed crystal.”

With regard to the phrase “solid solution,” it was agreed to replace this phrase with the originally recited “mixed crystal” and to accept the definition thereof given on page 11 of the response filed September 28, 2009.

With regard to the usage of the phrase “complemented” or “complimentarily,” it was agreed to remove these phrases from the claims.

Additionally, it was agreed that an amendment to claim 1 to recite that the emission spectra of the first and second additives are so similar so as to be indistinguishable, would appear to place claim 1 in condition for allowance, absent the finding of any new art.

2. In the claims

As shown in the foregoing LIST OF CURRENT CLAIMS, the claims have been amended to more clearly point out the subject matter for which protection is sought.

A. Claim amendments

Claim 1 is amended for clarity and to recite that the emission spectra of the first and second additives are so similar so as to be indistinguishable. It is respectfully

submitted that no new matter is added, since the changes merely remove recitations, and support for the amendments may be found, for example, at least in Fig. 4 of the pending application and, for example, at least in paragraphs [0015], [0018], [0034] and [0037] of the accompanying description in the specification as originally filed.

Claim 2 remains canceled.

Claim 10 is amended to place the claim in a previously presented form by replacing “solid solution” with the previously used phrase “mixed crystal.”

Claim 11 remains canceled.

Claims 12-18 are amended for clarity. It is respectfully submitted that no new matter is added as the changes simply correct minor informalities.

Claims 3-9 and 19-25 are left unchanged.

New claim 26 is presented to recite similar features as amended claim 1. It is respectfully submitted that no new matter is added, since support for the new claim may be found in previously presented claim 1 and, for example, at least in Fig. 4 of the pending application and, for example, at least in paragraphs [0015], [0018], [0034] and [0037] of the accompanying description in the specification as originally filed.

Entry of the LIST OF CURRENT CLAIMS is respectfully requested in the next Office communication.

B. Objection to claim 12

Reconsideration and removal of the objection to claim 12 is respectfully requested, in view of the amendments to claim 12, on the basis that amended claim 12 depends from a single claim.

Accordingly, removal of the objection to claim 12 is kindly requested.

C. Rejection of claim 10 under 35 U.S.C. § 112 first paragraph

Reconsideration of this rejection is respectfully requested, in view of the amendment to claim 10, on the basis that the term “solid solution” is removed from the claim and the term “mixed crystal” is enabled.

Accordingly, withdrawal of this rejection is respectfully requested.

D. Rejection of claims 1, 12, 14, 15, and 17 under 35 U.S.C. § 112 second paragraph

Reconsideration of this rejection is respectfully requested, in view of the amendments to claims 1, 12, 14, 15, and 17, on the basis that the amended claims are clear and definite.

Claims 1, 14, and 15 are amended to remove the phrase “complemented” or “complimentarily,” and to simply require that the emission spectra overlap.

Claim 12 is amended to remove the recitation of “according to claim 6.”

Claim 17 is amended to remove the phrase “according to claim 11.”

Accordingly, it is respectfully submitted that amended claims 1, 12, 14, 15, and 17 are clear and definite, and withdrawal of this rejection is respectfully requested.

3. Provisional rejection of claims 1, 3-9, 12-19, and 21-25 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-28 of copending application no. 10/574,831

Reconsideration of this provisional rejection is respectfully requested, in view of the amendment to claim 1, from which the remaining claims depend, on the basis that claims 1-28 of copending application no. 10/574,831 do not render amended claim 1 obvious, since there is no requirement in claims 1-28 of copending application no. 10/574,831 that the emission spectra of the first and second additives are so similar so as to be indistinguishable, as is recited in amended claim 1.

Accordingly, withdrawal of this rejection is respectfully requested.

Further, in accordance with MPEP § 804, if the provisional double patenting rejection is the only remaining rejection of the claims, withdrawal of the provisional double patenting rejection and allowance of the claims is respectfully requested.

4. Rejection of claims 1, 5-8, 12, 14, 16-18, 20, and 22-25 under 35 U.S.C. § 102(b) as being anticipated by U.S. patent no. 4,013,490 (*Ryan et al.*)

Reconsideration of this rejection is respectfully requested, in view of the amendments to claim 1, on the basis that the *Ryan* patent fails to disclose each and every recited element of amended claim 1. The remaining claims depend from claim 1, and are therefore patentable as containing all of the recited elements of claim 1, as well as for their respective recited features.

By way of review, amended claim 1 recites a composition for a coding forming at least part of a coding system for a value document. The composition includes a luminescent basic substance and at least one luminescent additive, wherein the luminescent basic substance and the luminescent additives each have coding-relevant emission lines located in a joint emission range. The composition also includes first and second luminescent additives which form a pair of mutually associated luminescent substances, and the emission spectra of the first and second additives, which are so similar so as to be indistinguishable, overlap in at least a subrange of the joint emission range.

Turning to the *Ryan* patent, there is disclosed a phosphor identification method where use is made of clearly discriminated and distinctive emission lines for an explosive agent (col. 3, lines 1-12; col. 4, lines 55-59; col. 11, lines 61-68).

This is in contrast to amended claim 1, in which use is made of a pair of mutually associated luminescent substances, and the emission spectra of the first and second additives are so similar so as to be indistinguishable.

Accordingly, it is respectfully submitted that the *Ryan* patent fails to disclose every feature of amended claim 1, and withdrawal of this rejection is respectfully requested.

As mentioned above, applicants submit that independent claim 1 is patentable and therefore, claims 5-8, 12, 14, 16-18, 20, and 22-25, which depend from claim 1, are also considered to be patentable as containing all of the elements of claim 1, as well as for their respective recited features.

5. Rejection of claims 1, 3-5, 14-18, 20, 21, 23, and 24 under 35 U.S.C. § 102(b) as being anticipated by U.S. patent no. 6,380,547 (*Gonzalez et al.*)

Reconsideration of this rejection is respectfully requested, in view of the amendments to claim 1, on the basis that the *Gonzalez* patent fails to disclose each and every recited element of amended claim 1. The remaining claims depend from claim 1, and are therefore patentable as containing all of the recited elements of claim 1, as well as for their respective recited features.

The features of amended claim 1 are discussed above in detail.

The *Gonzalez* patent discloses a process for marking an article by selecting a laser luminophore that fluoresces in a predetermined range of the spectrum when exposed to excitation light of a predetermined wavelength (abstract). A plurality of laser luminophores can be used such that the combination yields a unique spectral signature (col. 1, lines 56-67). Peaks may be distinguishable by  $\lambda_{max}$ , by intensity, by shape, and/or by decay characteristics (col. 2, lines 65-67).

In one embodiment, a multiplicity of laser luminophores are carried by a carrier medium, and each laser luminophore is spectrally distinguishable from the other laser luminophores (col. 3, lines 45-51).

In another embodiment, each of the discrete laser luminophores is characterized by emission of a fluorescence spectrum in response to exposure to exciting light which

has at least one characterizing peak which differentiates its spectrum from the spectra of the other discrete laser luminophores of the plurality (col. 4, lines 20-25).

Thus, while the *Gonzalez* patent discloses the use of a plurality of luminophores, which can be combined to create a spectral signature (col. 8, lines 12-13), there is no disclosure of using a pair of mutually associated luminescent substances, and the emission spectra of the first and second additives are so similar so as to be indistinguishable, as is required by amended claim 1.

In fact, the *Gonzalez* patent specifically discloses the use of spectrally distinguishable luminophores (col. 3, lines 45-51).

Accordingly, the *Gonzalez* patent fails to disclose every feature of amended claim 1, and withdrawal of this rejection is kindly requested.

As mentioned above, applicants submit that independent claim 1 is patentable and therefore, claims 3-5, 14-18, 20, 21, 23, and 24, which depend from claim 1, are also considered to be patentable as containing all of the elements of claim 1, as well as for their respective recited features.

6. New claim 26

New claim 26 is presented to have similar features as amended claim 1, with the difference being that the feature of amended claim 1 that the emission spectra of the first and second additives are so similar so as to be indistinguishable, is replaced by the language that the emission spectra of the first and second additives overlap each other so that the presence of the first and second luminescent additives can practically not be recognized.

This language embodies the same concept as amended claim 1, in that the use of first and second luminescent additives can practically not be recognized since the emission spectra thereof overlap such that the presence of the first and second luminescent additives can practically not be recognized.

It is respectfully submitted, for similar reasons as discussed above, that the *Ryan* and *Gonzalez* patents fail to disclose the emission spectra of the first and second additives overlap each other so that the presence of the first and second luminescent additives can practically not be recognized, as is required by new claim 26.

Accordingly, it is respectfully submitted that new claim 26 is patentable.

7. Conclusion

As a result of the amendment to the claims, and further in view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that every pending claim in the present application be allowed and the application be passed to issue.

Please charge any additional fees required or credit any overpayments in connection with this paper to Deposit Account No. 02-0200.

If any issues remain that may be resolved by a telephone or facsimile communication with the applicants' attorney, the examiner is invited to contact the undersigned at the numbers shown below.

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Respectfully submitted,  
  
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